

DATE: Wednesday, March 27, 2002 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
•	PT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR		
<u>L27</u>	L26 and archive	13	<u>L27</u>
<u>L26</u>	L25 and library same media	54	<u>L26</u>
<u>L25</u>	11 and software same agents	2742	<u>L25</u>
<u>L24</u>	modular same network same backup and retriev\$	9	<u>L24</u>
<u>L23</u>	modular same network same backup and retrieval with system	1	<u>L23</u>
<u>L22</u>	modular same network same backup with system	14	<u>L22</u>
<u>L21</u>	11 and modular same backup and retrieval	16	<u>L21</u>
<u>L20</u>	L5 and ((709/\$)!.CCLS.)	17	<u>L20</u>
<u>L19</u>	L2 and ((709/204)!.CCLS.)	17	<u>L19</u>
<u>L18</u>	L5 and ((709/204)!.CCLS.)	0	<u>L18</u>
<u>L17</u>	L1 and ((709/204)!.CCLS.)	428	<u>L17</u>
<u>L16</u>	((709/300)!.CCLS.)	0	<u>L16</u>
<u>L15</u>	L1 and ((709/300)!.CCLS.)	0	<u>L15</u>
<u>L14</u>	L2 and ((709/300)!.CCLS.)	0	<u>L14</u>
<u>L13</u>	L5 and ((709/300)!.CCLS.)	0	<u>L13</u>
<u>L12</u>	L11 and ((709/300)!.CCLS.)	0	<u>L12</u>
<u>L11</u>	L10 and archive	42	<u>L11</u>
<u>L10</u>	L9 and files	98	<u>L10</u>
<u>L9</u>	L8 and backup and retrieval	111	<u>L9</u>
<u>L8</u>	L1 and library same media	1581	<u>L8</u>
<u>L7</u>	L6 and archive	13	<u>L7</u>
<u>L6</u>	L5 and files	75	<u>L6</u>
<u>L5</u>	L1 and library near media	124	<u>L5</u>
<u>L4</u>	L3 and archive	1	<u>L4</u>
<u>L3</u>	L2 and library near media	13	<u>L3</u>
<u>L2</u>	L1 and backup and retrieval	1858	<u>L2</u>
<u>L1</u>	network	524058	<u>L1</u>

END OF SEARCH HISTORY

Print Generate Collection

L26: Entry 31 of 54

File: USPT

May 2, 2000

US-PAT-NO: 6058163

DOCUMENT-IDENTIFIER: US 6058163 A

TITLE: Method and system for monitoring call center service representatives

DATE-ISSUED: May 2, 2000

INVENTOR-INFORMATION:

COUNTRY STATE ZIP CODE CITY NAME Flower Mound TX Pattison; Jon A. Plano TX Vizard; Paul A. TX Plano Maloney; Michael J. CA San Jose McCalmont; David T.

ASSIGNEE-INFORMATION:

STATE ZIP CODE COUNTRY TYPE CODE CITY NAME

02 Fort Worth TX Teknekron Infoswitch Corporation

APPL-NO: 8/ 854435 [PALM] DATE FILED: May 12, 1997

PARENT-CASE:

CROSS REFERENCE TO RELATED APPLICATIONS This application is a continuation-in-part application of U.S. application Ser. No. 08/667,861, filed Jun. 20, 1996 by Michael J. Maloney and David T. McCalmont, now, U.S. Pat. No. 5,696,811, which is a continuation of application Ser. No. 08/434,261, filed May 3, 1995 by Michael J. Maloney and David T. McCalmont, now U.S. Pat. No. 5,535,256, issued Jul. 9, 1996, which is a continuation of application Ser. No. 08/126,080, filed Sep. 22, 1993 by Michael J. Maloney and David T. McCalmont, now abandoned. This application is related to U.S. application Ser. No. 08/854,819, filed May 12, 1997 by Jon A. Pattison, Paul A. Vizard, Michael J. Maloney, and David T. McCalmont, pending.

INT-CL: [7] H04 M 3/22

US-CL-ISSUED: 379/34; 379/85, 379/88.09, 379/88.1, 379/88.25, 379/112, 379/133,

379/265

US-CL-CURRENT: 379/265.06; 379/133, 379/85, 379/88.09, 379/88.1, 379/88.25

FIELD-OF-SEARCH: 379/34, 379/35, 379/88.22, 379/88.27, 379/265, 379/266, 379/309, 379/85, 379/88.09, 379/88.1, 379/88.25, 379/112, 379/133, 379/135

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search ALL Search Selected

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL		
	4608638	August 1986	Tsikos	701/35		
	4694483	September 1987	Cheung	379/34		
	4763353	August 1988	Canale et al.	379/157		
	4815120	March 1989	Kosich	379/34		
	4924488	May 1990	Kosich	379/34		
П	5003574	March 1991	Denq et al.	379/75		
	5206903	April 1993	Kohler et al.	379/309		
	5210789	May 1993	Jeffus et al.	379/127		
	5247569	September 1993	Cave	379/113		
	5299260	March 1994	Shaio	379/265		
	5309513	May 1994	Rose	379/265		
	5317628	May 1994	Misholi et al.	379/88.14		
	5418845	May 1995	Reeder	379/213		
	5465286	November 1995	Clare et al.	379/34		
	5499291	March 1996	Kepley	379/265		
	5528678	June 1996	Kaplan	379/201		
	5530744	June 1996	Charalambous et al.	379/265		
	5535256	July 1996	Maloney et al.	379/34		
	5537470	July 1996	Lee	379/266		
	5621789	April 1997	McCalmont et al.	379/265		
	5696811	December 1997	Maloney et al.	379/34		
	5699412	December 1997	Polcyn	379/89		
	5703943	December 1997	Otto	379/265		
	5715307	February 1998	Zazzera	379/265		
	5790650	August 1998	Dunn et al.	379/265		
	5818907	October 1998	Maloney et al.	379/34		
	5825869	October 1998	Brooks et al.	379/265		
	5828747	October 1998	Fisher et al.	379/309		
			•			
	FOREIGN PATENT DOCUMENTS					

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0140220	February 1987	EPX	,
0644510	March 1995	EPX	
9209164	May 1992	WOX	

OTHER PUBLICATIONS

Aspect Callcenter Product Specification, Aspect Telecommunications Crop. May 23, 1988, pp. 1-1, 8-7, 8-8, 11-5 and 13-1. PCT Search Report in International Application No. PCT/US 98/09455, dated Sep. 4,

1998.
Steve McNamara, "Quality Must be Seen and Heart", Inbound/Ourbound Magazine, Dec. 1989, pp. 66-67.
Madeline Bodin, "Keeping an Eye on Your Agents", Call Center Magazine Feb. 1993, pp. 32-34.
Aspect CallCenter Product Specification, Aspect Telecommunications Corp. May 23, 1988, pp. 1-1, 8-7, 8-8, 11-5 and 13-1.

ART-UNIT: 272
PRIMARY-EXAMINER: Zele; Krista
ASSISTANT-EXAMINER: Foster; Roland G.
ATTY-AGENT-FIRM: Baker & Botts, L.L.P.

ABSTRACT:

A method and system permit monitoring of a call center agent or similar service representative in servicing calls in a call center using a variety of scheduling criteria. Monitoring schedules for the service representatives may be based on monitoring periods having scheduling criteria, such as a time interval, a scheduling rule, a number of calls, a monitoring length, a random indicator, call type information, agent performance level information, call traffic information, and others. The method and system record a customer call if the scheduling criteria of the associated monitoring period is met.

36 Claims, 13 Drawing figures



End of Result Set

Generate Collection Print

L27: Entry 13 of 13

File: USPT

Jul 16, 1996

US-PAT-NO: 5537585

DOCUMENT-IDENTIFIER: US 5537585 A

TITLE: Data storage management for network interconnected processors

DATE-ISSUED: July 16, 1996

INVENTOR-INFORMATION:

CITY STATE ZIP CODE COUNTRY NAME Boulder Blickenstaff; Ronald L. CO Brant; Catherine I. Boulder CO Dodd; Paul D. Niwot CO Boulder Kirchner; Anton H. CO Thornton CO Montez; Jennifer K. Boulder CO Trede; Brian E. CO Winter; Richard A. Longmont

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

Avail Systems Corporation Boulder CO 02

APPL-NO: 8/ 201658 [PALM]
DATE FILED: February 25, 1994

INT-CL: [6] G06 F 17/30

US-CL-ISSUED: 395/600; 395/440, 395/444, 395/800, 364/222.81, 364/281.6, 364/962,

364/974, 364/DIG.1, 364/DIG.2

US-CL-CURRENT: 707/205; 707/204, 711/113, 711/117

FIELD-OF-SEARCH: 395/600, 395/800, 395/440, 395/444

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4638424	January 1987	Beglin	395/444
5155835	October 1992	Belsan	395/441
5193171	March 1993	Shinmura	395/440
5218695	June 1993	Noveck et al.	395/600
5276860	January 1994	Fortier et al.	395/575
5276867	January 1994	Kenley et al.	395/600
5313631	May 1994	Kao	395/600
5325505	June 1994	Hoffecker et al.	395/600
<u>5367698</u>	November 1994	Webber et al.	395/800
<u>5475834</u>	December 1995	Anglin	395/600

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO PUBN-DATE
WO92/09035 November 1990

COUNTRY US-CL

XOW

OTHER PUBLICATIONS

R. D. Christman, "Experience With File Migration", Report #LA 9014-MS, UC-32, Los Alamos National Laboratories, 1981, pp. 1-13.

Thompson et al., "The Design and Use of a 2 Terabyte Optical Archival Store", IEEE Transactions on Nuclear Science, vol. 35, No. 1, Feb., 1988, pp. 243-247. Thanhardt et al., "File Migration in the NCAR Mass Storage System", Ninth IEEE Symposium on Mass Storage Systems, Monterey, Califoria, 31 Oct.--3 Nov., 1988, pp. 114-121.

Anna Hac, "A Distributed Algorithm for Performance Improvement Through File Migration, and Process Migration", IEEE Transactions on Software Engineering, vol. 15, No. 11, Nov. 1989, pp. 1459-1470.

David A. Arneson, "Development of Omniserver", Tenth IEEE Symposium on Mass Storage Systems, IEEE Computer Society Press, 1990, pp. 88-93.

Bhasker et al., "Architecture and Implementation of an On-Line Data Archive and Distribution System", Proceedings of the Twelfth IEEE Symposium on Mass Storage Systems. Putting All That Data to Work, Monterey, Califoria, 26-29 Apr. 1993, pp. 177-182

Hurley et al., "Potential Benefits of File Migration in a Heterogeneous Distributed File System", Proceedings ICCI '93. Fifth International Conference on Computing and Information, Sudbury, Ontario Canada, 27-29 May 1993, pp. 123-127.

Information, Sudbury, Ontario Canada, 27-29 May 1993, pp. 123-127.

Article: Renaissance: Managing The Network Computer And its Storage Requirements by Antony Foster and David Habermehl from the Eleventh IEEE Syposium on Mass Storage Systems.

Article: The IBM 3850: A Mass Storage System With Disk Characteristics by Clayton T. Johnson, published in Proceedings Of the IEEE, vol. 63, No. 8.

Article: Migrating Data To Cheaper Storage by Salvatore Salamone, from Data Communications 22 (1993) Aug., No. 11.

ART-UNIT: 237

PRIMARY-EXAMINER: Black; Thomas G. ASSISTANT-EXAMINER: Lintz; Paul R.

ATTY-AGENT-FIRM: Duft, Graziano & Forest

ABSTRACT:

The data storage system is connected to a local area network and includes a storage server that on a demand basis and/or on a periodically scheduled basis audits the activity on each volume of each data storage device that is connected to the network. Low priority data files are migrated via the network and the storage server

to backend data storage media, and the directory resident in the data storage device is updated with a placeholder entry to indicate that this data file has been migrated to backend storage. When the processor requests this data file, the placeholder entry enables the storage server to recall the requested data file to the data storage device from which it originated.

85 Claims, 13 Drawing figures

End of Result Set

Generate Collection Print

L21: Entry 16 of 16 File: DWPI Jan 25, 2001

DERWENT-ACC-NO: 2001-464609

DERWENT-WEEK: 200150

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TITLE: Modular backup and retrieval system for network connected computer, has manager module that manages and controls media module that controls backup of data onto library devices

Basic Abstract Text:

NOVELTY - The manager module in computer (110) is in communication with media modules (126,136) of computers (120,130). Media modules are coupled to library devices (122,132). The media module controls physical backup of data onto library devices and manager module controls media module and also manages overall backup and retrieval functions.

Basic Abstract Text:

USE - For controlling data backup in computers or network connected computer.

Basic Abstract Text:

ADVANTAGE - The independent software agents, manager module and software module, focus specifically on archival process and are cohesively operated in network environment across several machines.

Basic Abstract Text:

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of $\frac{\text{modular network}}{\text{backup system}}$.

Standard Title Terms:

MODULE RETRIEVAL SYSTEM NETWORK CONNECT COMPUTER MANAGE MODULE MANAGE CONTROL MEDIUM MODULE CONTROL DATA LIBRARY DEVICE< br>

Title (1):

Modular backup and retrieval system for <u>network</u> connected computer, has manager module that manages and controls media module that controls <u>backup</u> of data onto library devices

Basic Abstract Text (1):

NOVELTY - The manager module in computer (110) is in communication with media modules (126,136) of computers (120,130). Media modules are coupled to library devices (122,132). The media module controls physical backup of data onto library devices and manager module controls media module and also manages overall backup and retrieval functions.

Basic Abstract Text (2):

USE - For controlling data backup in computers or network connected computer.

Basic Abstract Text (3):

ADVANTAGE - The independent software agents, manager module and software module, focus specifically on archival process and are cohesively operated in network environment across several machines.

Basic Abstract Text (4):

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of modular network backup system.



Generate Collection

File: USPT

Print

Sep 2, 1997

US-PAT-NO: 5664146

L3: Entry 8 of 13

DOCUMENT-IDENTIFIER: US 5664146 A

TITLE: Graphical user communications interface for an operator in a manual data

storage library

DATE-ISSUED: September 2, 1997

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Bolin; Mark Robert Springfield OR Fisher; James Arthur Tucson AZ Goncharsky; Robert Samuel Tucson AZ

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

International Business Machines
Corporation

Armonk NY

02

APPL-NO: 8/ 606632 [PALM]
DATE FILED: February 26, 1996

PARENT-CASE:

This application is a continuation of application Ser. No. 08/235,079, filed Apr. 29, 1994, now abandoned.

INT-CL: [6] $\underline{G06} \ \underline{F} \ \underline{12/00}, \ \underline{G06} \ \underline{F} \ \underline{13/00}$

US-CL-ISSUED: 711/115; 395/326, 395/833, 711/114

US-CL-CURRENT: 711/115; 345/762, 345/781, 710/13, 711/114

FIELD-OF-SEARCH: 395/833, 395/404, 395/441, 395/442, 395/444, 395/326, 395/335,

395/353, 360/85, 360/92, 360/96.5, 360/98.01, 360/99.02, 360/99.06

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4283621	August 1981	Pembroke	235/375
<u>4399936</u>	August 1983	Rueger	226/92
4413328	November 1983	Videki, II	395/118
4435762	March 1984	Milligan	395/250
4601003	July 1986	Yoneyama et al.	395/159
4725977	February 1988	Izumi et al.	395/442
4860133	August 1989	Baranski	360/92
4945428	July 1990	Waldo	360/92
4945429	July 1990	Munro et al.	360/92
<u>4964039</u>	October 1990	Izawa et al.	395/500
4974156	November 1990	Harding et al.	395/489
4987533	January 1991	Clark et al.	395/620
5129076	July 1992	Freeman et al.	395/438
5134580	July 1992	Bertram et al.	395/651
5241662	August 1993	Maniwa et al.	395/421.08
5303214	April 1994	Kulakowski et al.	369/34
5325523	June 1994	Beglin et al.	395/616
5343403	August 1994	Beidle et al.	364/478
5437014	July 1995	Bushoom et al.	
5450384	September 1995	Dahman et al.	369/30
5450545	September 1995	Martin et al.	395/701
5455409	October 1995	Smith et al.	235/385

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO PUBN-DATE COUNTRY US-CL 0 535 922 April 1993 EPX

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Koontz, Xpress Librarian, PC Magazine, v12, n16, p311 (3), Sep. 28, 1993. Gallenberger et al., Kodak optical disk and microfilm technolgies carve niches in specific applications, Optical Information Systems, v. 9; n3, p127 (4), May-Jun. 1989.

Ali, Retrieval commands of CD-ROM databases: a comparison of selected products, CD-ROM Professional, v3, n3, p28(6), May 1990.

New XL/Datacomp Automated Mass Storage Solution Features Tape Library from ATL Products, PR Newswire, p0607LA013, Jun. 7, 1993.

Bell, Providing remote access to CD-ROMS; some practical advice, CD-ROM Professional, v6, n1, p43(4), Jan. 1993.

Schroeder, Auto-loaders gain management; storage software controls tape devices, PC Week, v11, n14, p55(2), Apr. 11, 1994.

Hamilton, Tape automation comes of Age, Computerworld, p. 33, Feb. 19, 1990.

Schoeniger, Data pecking order, DEC Professional, v13, n1, p24(9), Jan. 1994.

The Pros Talk For 2.5, DBMS, v6, n13, p48(1), Dec. 1993.

Mezick, Muscle 2.1 beefs up Visual Basic's functionality, InfoWorld, v15, n37, p113(1), Sep. 13, 1993.

Notess, A User Interface management system for HP-UX System administration applications, Hewlett-Packard Journal, v44, n3, p80 (5), Jun. 1993. T. W. Beglin and H. E. Kamionka, "User Controls During Tape End-Of-Volume Processing", IBM Technical Disclosure Bulletin, vol. 26, No. 3A, Aug. 1983, pp. 1303,1305.

R. S. Goncharsky, J. W. Peake and R. A. Ripberger, "Logical Group of Data Storage Media in a Library System" IBM Technical Disclosure Bulletin, vol. 35, No. 5, Oct. 1992. pp. 17-20.

1992, pp. 17-20.
Gerald J. Wade, Multi-Terabyte Automated Mass Storage, IEEE Symposium on Mass Storage Systems, May 1990, pp. 51-57.

ART-UNIT: 232

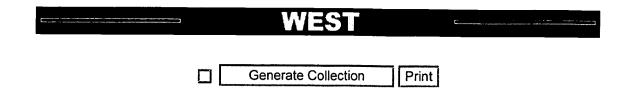
PRIMARY-EXAMINER: Kim; Matthew M.

ATTY-AGENT-FIRM: Baker, Maxham, Jester & Meador

ABSTRACT:

An operator to host communications interface for managing a manual data storage library. A host processor controls Peripheral Data Storage Devices (PDSDs) in the library. Displayed operator interaction fields are presented by a graphical user interface on the screen of a display device connected to a library manager controller. Library manager program code loaded in program memory in the library manager controller is provided with interface logic, for communicating with external devices, as well as the PDSDs through the host processor. The operator communications interface is an integral component of the library and thus may be used for: alerting an operator of the need to mount or demount a particular data medium; alerting an operator with coherent and succinct messages thus improving the quality of messages provided to operators; and alerting an operator with a minimum number of messages. Additionally, the operator may use the communications interface to access the status of PDSDs and to schedule maintenance activities, such as cleaning of the PDSDs.

42 Claims, 16 Drawing figures



L11: Entry 32 of 42

File: USPT

Jun 9, 1998

US-PAT-NO: 5764972

DOCUMENT-IDENTIFIER: US 5764972 A

TITLE: Archiving file system for data servers in a distributed network environment

DATE-ISSUED: June 9, 1998

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

Crouse; Donald D.

Murphy

TX

Coverston; Harriet G.

New Brighton

MN

Cychosz; Joseph M.

W. Lafayette

IN

ZIP CODE

ASSIGNEE-INFORMATION:

NAME

CITY

STATE

COUNTRY

TYPE CODE

LSC, Inc.

Minneapolis

MN

02

APPL-NO: 8/ 481924 [PALM] DATE FILED: June 7, 1995

PARENT-CASE:

This is a continuation of application Ser. No. 08/012,298, filed Feb. 1, 1993, now abandoned.

INT-CL: [6] $\underline{G06} + \underline{17/30}$

US-CL-ISSUED: 395/601; 395/610, 395/620 US-CL-CURRENT: 707/1; 707/10, 707/204

FIELD-OF-SEARCH: 364/DIG.1, 364/DIG.2, 395/600, 395/700, 395/601, 395/610, 395/620

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE - NAME	IIO OT
П	4827399	May 1989	Shibayama	US-CL
·I		•	Silibayama	364/200
	4887204	December 1989	Johnson et al.	364/200
	4888681	December 1989	Bames et al.	364/200
	4972368	November 1990	O'Brien et al.	364/900
	5014197	May 1991	Wolf	364/200
	5077658	December 1991	Bendert et al.	395/600
	<u>5133065</u>	July 1992	Cheffetz et al.	395/575
	<u>5146561</u>	September 1992	Carey et al.	364/200
	5151989	September 1992	Johnson et al.	395/600
	5163131	November 1992	Row et al.	395/200
	5187786	February 1993	Densmore et al.	395/600
FOREIGN DAMINE DOGGETONE				•

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO				
476	841			

PUBN-DATE

COUNTRY

US-CL

March 1992 EPX

OTHER PUBLICATIONS

Microsoft Press Computer Dictionary, 2nd Edition, 1993, pp. 25 & 35. Bach, M. The Design of the UNIX.RTM. Operating System, (1986), Prentice-Hall, Chpts. 3-5 pp. 33-145.

Leffler, McKusich, Karels and Quarterman, The Design and Implementation of the 4.3 B50 UNIX.RTM. Operating System, (1990) Chpt. 7, pp. 187-223. Kochan, S. UNIX.RTM. Networking, Chpts. 4 & 7 (1989) Hayden Books, pp. 93-132 and 203-235.

Kleiman, S., "Vnodes: An Architecture for Multiple <u>File</u> System Types in Sun UNIX", Conference Proceedings, USENIX 1986 Summer Technical Conference and Exhibition, pp. 238-246.

Sandberg, R. et al. "Design and Implementation of the Sun Network File System", Conference Proceedings USENIX, 1985, pp.119-130.

"The Uni-Tree.TM. Virual Disk System: An Overview" General Atomics/Discos Division (1991).

"Epoch-1 Infinite Storage.TM. Storage Server Technical Summary", Epoch Systems, Inc. Rev. II, (Jul. 1990).

Montgomery, J. "Product Review: Silicon Graphics 4D/400 Server", Digital Review, Sep. 9, 1991.

ART-UNIT: 237

PRIMARY-EXAMINER: Black; Thomas G. ASSISTANT-EXAMINER: Von Buhr; Maria N. ATTY-AGENT-FIRM: Patterson & Keough, P.A.

ABSTRACT:

An archiving $\underline{\text{file}}$ system is specifically designed to support the storage of, and access to, remote $\underline{\text{file}}$ stored on high speed, large capacity $\underline{\text{network}}$ data servers. The archiving $\underline{\text{file}}$ system automatically $\underline{\text{archives}}$ remote $\underline{\text{files}}$ across multiple types of secondary storage media on such $\underline{\text{network}}$ data servers based on a set of hierarchically selectable archival attributes selectively assigned to each remote $\underline{\text{file}}$. The archiving $\underline{\text{file}}$ system is completely transparent to the user program and operates on remote $\underline{\text{files}}$ by providing a different $\underline{\text{file}}$ control program and a different $\underline{\text{file}}$ structure on the $\underline{\text{network}}$ data server, without the need to modify the standard $\underline{\text{file}}$ system that is native to a particular operating system program executing on the user nodes or the standard $\underline{\text{network}}$ file interfaces executing on the

distributed computer $\underline{\text{network}}$ environment.

17 Claims, 26 Drawing figures

Standard Title Terms (1):
MODULE RETRIEVAL SYSTEM NETWORK CONNECT COMPUTER MANAGE MODULE MANAGE CONTROL MEDIUM
MODULE CONTROL DATA LIBRARY DEVICE